

DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL

```
DDDDDDDD  CCCCCCCC  XX      XX  SSSSSSSS  TTTTTTTTTT  AAAAAA  RRRRRRRR  TTTTTTTTTT
DDDDDDDD  CCCCCCCC  XX      XX  SSSSSSSS  TTTTTTTTTT  AAAAAA  RRRRRRRR  TTTTTTTTTT
DD      DD  CC      XX      XX  SS      TT      AA      AA  RR      RR  TT
DD      DD  CC      XX      XX  SS      TT      AA      AA  RR      RR  TT
DD      DD  CC      XX      XX  SS      TT      AA      AA  RR      RR  TT
DD      DD  CC      XX      XX  SS      TT      AA      AA  RRRRRRRR  TT
DD      DD  CC      XX      XX  SSSSSS  TT      AA      AA  RRRRRRRR  TT
DD      DD  CC      XX      XX  SSSSSS  TT      AAAAAAAAAA  RR      RR  TT
DD      DD  CC      XX      XX  SS      TT      AA      AA  RR      RR  TT
DD      DD  CC      XX      XX  SS      TT      AA      AA  RR      RR  TT
DD      DD  CC      XX      XX  SSSSSSSS  TT      AA      AA  RR      RR  TT
DDDDDDDD  CCCCCCCC  XX      XX  SSSSSSSS  TT      AA      AA  RR      RR  TT
DDDDDDDD  CCCCCCCC  XX      XX  SSSSSSSS  TT      AA      AA  RR      RR  TT

LL      IIIIIII  SSSSSSSS
LL      IIIIIII  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLL  IIIIIII  SSSSSSSS
LLLLLLLLLL  IIIIIII  SSSSSSSS
```

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DEBUGGER START UP

```
0000 1      .TITLE  DCXSTART - DCL DEBUG VERSION START MODULE
0000 2      .IDENT  'V04-000'
0000 3
0000 4
0000 5 *****
0000 6 *****
0000 7 *
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0000 25 *
0000 26 *****
0000 27 *****
0000 28  COMMAND LANGUAGE INTERPRETER DEBUGGER INITIALIZATION
0000 29
0000 30  TIM HALVORSEN, 24-JAN-1980
0000 31
0000 32  MODIFIED BY:
0000 33
0000 34      V005      TMH0005      Tim Halvorsen      09-Aug-1981
0000 35      Exit from process if any debugger initialization problems.
0000 36
0000 37      V004      TMH0004      Tim Halvorsen      04-Apr-1981
0000 38      Use new LOGIN-CLI protocol.
0000 39
0000 40      V003      TMH0003      Tim Halvorsen      28-Mar-1981
0000 41      Skip the debugger entry point if not interactive.
0000 42
0000 43      V002      TMH0002      Tim Halvorsen      23-Feb-1981
0000 44      Remove STEP-OVER DELTA string
0000 45
0000 46      001      TMH0001      T. Halvorsen      09-Jul-1980
0000 47      Call normal initialization AFTER it resets SP/FP.
0000 48  ---
0000 49
0000 50
0000 51  MACRO LIBRARY CALLS
0000 52
0000 53
0000 54      $PPDDEF      :PROCESS PERMANENT DATA AREA
0000 55      $PSLDEF      :DEFINE PROCESSOR STATUS FIELDS
```

```
0000 57 .SBTTL  DEBUGGER START UP
0000 58 :+
0000 59 : START-UP WITH DEBUGGER
0000 60 :
0000 61 : THIS ENTRY POINT IS JUMPED TO AT THE CONCLUSION OF LOGGING A USER ONTO
0000 62 : THE SYSTEM. ALL INPUT AND OUTPUT FILES ARE OPEN AND THE PROCESS PERMANENT
0000 63 : DATA AREA (PPD) HAS BEEN INITIALIZED.
0000 64 :-
0000 65
00000000 66 .PSECT  DCL$$BASE,BYTE,RD,NOWRT
0000 67
0000 68 BASE_OF_CLI:
03 00000002'GF 01 E1 0000 69 BBC #PPDSV MODE,G^CTLSAG_CLIDATA+PPDSW_FLAGS,10$ ;BR IF NOT BATCH
FFF7' 31 0008 70 BRW DCL$STARTUP+2 ; IF BATCH, SKIP DEBUGGER ENTRY POINT
5E 00000008'GF D0 000B 71 10$: MOVL G^CTLSAL_STACK+8,SP ; RESET SUPERVISOR MODE STACK POINTER
00 DD 0012 72 PUSHL #0 ; ALLOCATE SPACE FOR XFER VECTOR ADDR
18'AF 01 FB 0014 73 CALLS #1,B^20$ ; MAKE DUMMY CALL FRAME (HANDLER=0)
0000 0018 74 20$: .WORD 0
50 00000000'EF 9E 001A 75 MOVAB XFER_ARRAY,R0 ; GET ADDRESS OF TRANSFER VECTOR
04 A0 0000'CF 9E 0021 76 MOVAB W^DCL$STARTUP,4(R0) ; SET SECOND TRANSFER ADDR TO HERE
04 AC 50 D0 0027 77 MOVL R0,4(AP) ; SET TRANSFER ARRAY FOR DEBUGGER
5B D2 AF 9E 002B 78 MOVAB BASE_OF_CLI,R11 ; R11 = BASE OF CLI FOR DEBUGGING
00000000'GF 6C FA 002F 79 CALLG (AP),G^XDT$START ; CALL DEBUGGER INITIALIZATION
0036 80 $EXIT_S ; EXIT IF ANY DEBUG INIT PROBLEMS
003F 81
00000000 82 .PSECT  DCL$DEBUG,WRT
0000 83 XFER_ARRAY:
00000000 0000 84 .LONG 0 ; PRIMARY TRANSFER (NOT USED)
00000000 0004 85 .LONG 0 ; SECONDARY = DCL INITIALIZATION
0008 86
0008 87 .END
```

DCXSTART
Symbol table

- DCL DEBUG VERSION START MODULE N 12

16-SEP-1984 00:24:15 VAX/VMS Macro V04-00
4-SEP-1984 23:40:12 [DCL.SRC]DCXSTART.MAR;1

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BASE OF CLI	00000000	R	02
CTLSAG_CLIDATA	*****	X	02
CTLSAL_STACK	*****	X	02
DCL\$STARTUP	*****	X	02
PPDSB_NPROCS	0000001C		
PPDSC_LENGTH	00000168		
PPDSK_LENGTH	00000168		
PPDSL_INPDEV	00000044		
PPDSL_LGI	00000014		
PPDSL_LSTSTATUS	00000018		
PPDSL_OUTDEV	00000064		
PPDSL_PRC	00000008		
PPDSQ_CLIREG	00000004		
PPDSQ_CLISYMTBL	0000000C		
PPDST_FILENAME	00000068		
PPDST_INPDVI	00000028		
PPDST_OUTDVI	00000048		
PPDSV_MODE	= 00000001		
PPDSW_FLAGS	00000002		
PPDSW_INPCHAN	0000001E		
PPDSW_INPDID	0000003E		
PPDSW_INPFID	00000038		
PPDSW_INPIFI	00000020		
PPDSW_INPISI	00000022		
PPDSW_OUTDID	0000005E		
PPDSW_OUTFID	00000058		
PPDSW_OUTIFI	00000024		
PPDSW_OUTISI	00000026		
PPDSW_SIZE	00000000		
SYS\$EXIT	*****	GX	02
XDT\$START	*****	X	02
XFER_ARRAY	00000000	R	03

! Psect synopsis !

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	00000168 (360.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
DCL\$BASE	0000003F (63.)	02 (2.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC BYTE
DCL\$DEBUG	00000008 (8.)	03 (3.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	9	00:00:00.03	00:00:01.56
Command processing	90	00:00:00.66	00:00:06.27
Pass 1	105	00:00:01.55	00:00:08.87
Symbol table sort	0	00:00:00.08	00:00:00.25
Pass 2	23	00:00:00.33	00:00:02.31
Symbol table output	3	00:00:00.03	00:00:00.03
Psect synopsis output	1	00:00:00.03	00:00:00.04

DCXSTART
VAX-11 Macro Run Statistics

- DCL DEBUG VERSION START MODULE B 13

16-SEP-1984 00:24:15 VAX/VMS Macro V04-00
4-SEP-1984 23:40:12 [DCL.SRC]DCXSTART.MAR;1

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Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	231	00:00:02.72	00:00:19.33

The working set limit was 900 pages.

5976 bytes (12 pages) of virtual memory were used to buffer the intermediate code.

There were 10 pages of symbol table space allocated to hold 94 non-local and 2 local symbols.

87 source lines were read in Pass 1, producing 15 object records in Pass 2.

10 pages of virtual memory were used to define 9 macros.

! Macro library statistics !

Macro library name

Macros defined

\$255\$DUA28:[SYSLIB]SYSBLDMLB.MLB;1
\$255\$DUA28:[DCL.OBJ]DCL.MLB;1
\$255\$DUA28:[SYS.OBJ]LIB.MLB;1
\$255\$DUA28:[SYSLIB]STARLET.MLB;2
TOTALS (all libraries)

0
1
0
5
6

161 GETS were required to define 6 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:DCXSTART/OBJ=OBJ\$:DCXSTART MSRC\$:DCXSTART/UPDATE=(ENH\$:DCXSTART)+EXECML\$/LIB+LIB\$:DCL/LIB+SYS\$LIBRARY:SYSBLDMLB/LIB

0069 AH-BT13A-SE
VAX/VMS V4.0

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EXAMDEP
LIS

EXIT
LIS

INTIMAGES
MAR

DCXSTART
LIS

CLIGBL
LIS

DISALLOW
LIS

CLINT
LIS

CANCEL
LIS